



# METRONOME 21 TRIP REPORT

Nanumaga, Nanumea & Niutao

## TEAM MEMBERS

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FINAL

## 1.0 Summary

This report shows the activities done in the Northern Islands of Tuvalu. The team successfully completed the activities for each island. The team stayed for each island in the North for 9 nights. The *FV Manau I* and *Manau II* were the team's main mode of transport in transporting the officers for each island in North.

However, there were some challenges that the activities cannot be executed like the Post-Harvest activities.

Funding for this trip was successful in executing the activities in the North.

Activities consisted of: Kaupule & Community Consultations, Awareness Program, Ciguatera Fish Poisoning Case Update, Boat & Canoe Survey, Manta Tow, LMMA, Grab Inspection and FADs Status & Maintenance. Also, collection of *Moto* samples from Ha'apai (Nanumaga) to be analyzed in Funafuti.

A consultation with the Kaupule was done in order for the team to adjust the changes according to the island's availability. Consultation with the community was when all groups were involved in discussing their management plan to list their main priority to be funded by the donor. There was an addition in the Management Plan which made the team have to accept their proposal to include it.

The results from those activities were recorded and highlighted. Afterwards, the issues and recommendations were noted for the metronome team to adapt when going to the North in the next trip.

## 2.0 Introduction

The team were funded by Pacific Regional Oceanscape Project (PROP), Tuvalu Fisheries Support Program II (TFSP II) and Government of Tuvalu. These funds were used to support the program conducted in the North in carrying out activities from the tentative program.

The team's purpose in coming to the North was to consult with the *Kaupule* and the communities in discussing their Management Plans (Fisheries related issues) as the donor was willing to aid the island's issue in prioritizing their most needed issue to be solved.

Also, the team had programs planned during their stay in each islands. Programs like Awareness Program, Ciguatera Fish Poisoning Case Update, LMMA Activities, Manta Tow, Post-Harvest Activities and FADs maintenance.

The Manta Tow activity was recently added this year. This was the buildup in counting the number of BDM species and its population together with the coverage of live and dead corals in Nanumea; part of the phase to develop a national management plan of sea cucumbers.

The team allow the *Kaupule* if there was any special request from the island to investigate in their marine resources.

## 3.0 Methodology

The team consisted of nine officers that were embarked on the FV *Manui II* to the Northern Islands. The team departed the Funafuti Wharf at 11:00 AM on the 16<sup>th</sup> of September. The team were dropped off on their first lag of the trip, Nanumaga; arrived at 09:45 AM on the 17<sup>th</sup> of September. The FV *Manui I* picked the team up on the 27<sup>th</sup> of September at 0100 in Nanumaga and dropped the team off in Nanumea at 0718 on the same day. Afterwards, the FV *Manui II* picked the team up on the 6<sup>th</sup> October at 1657 in Nanumea then dropped the team off in Niutao on the 7<sup>th</sup> October at 0945. The FV *Manui II* picked the team up on the 17<sup>th</sup> October at 0930 then arrived in Funafuti on the 18<sup>th</sup> October at 0845.

The arrangement was made prior for the team's departure to the North. This was done by contacting the Island Secretary (*Failautusi*) for booking the consultation for the *Kaupule* and arranging the accommodation for the team to stay. Prior to the team's departure to the next destination, the team had a final consultation with the *Kaupule* in presenting the results from the activities.

The island communities were gathered in the meeting hall to look at the Management Plans that were done previously with the R2R project. The community focused on the Monitoring Plan and discussed each of the fisheries related issues of their own island.

Selected number of presenters presented during the Community and School awareness in raising awareness on the islands' marine resources and sea safety of fishermen.

The Refresher training for Island Data Collector was done by arranging the time available for the Data Collector to visit the team.

The team members would visit to the medical center and discuss with the nurse on the positive cases of Ciguatera Fish Poisoning.

The group would stroll around the island to find the boat or canoe then gets its measurements (measuring the length of the boat or canoe). Coordinates were recorded of where the boat or canoe was located using a GPS

The team from Resource Assessment and Monitoring sub-section made a trip around the lagoon and used the Manta Tow method in counting the invertebrates (Beche-de-mer or BDM).

There were two methods used to collect LMMA related information during this Metronome trip.

1. Consultation with the *Kaupule* members
2. Exploring and observing the LMMA.

The Operations team and some members from the Resource Assessment & Monitoring sub-section made an inspection on the FADs by observing its status.

The Post-Harvest Training was supposed to be executed in that trip. However, due to the ingredients that were not available in stores in Funafuti; activity for the Post-Harvest Training was cancelled.

The team collected *Moto* samples from the Ha'apai. The samples were placed in the vial containing brine solution for preservation.

Prior to the team's departure, the metronome team had a final consultation with the *Kaupule* members in presenting the findings made during the team's stay for a week.

## 4.0 Results & Data Storage

### 4.1 Kaupule Consultation

The team had their first consultation with the *Kaupule* prior to the activities made. There were some changes made in the tentative program. The team asked the *Kaupule* if they have a special request to give to the teams to assess or investigate with their marine resources.

In Nanumaga, the *Kaupule* requested that when the team comes to the North next year. The officers need to investigate on the mangroves and analysis of the *Moto*.

### 4.2 Community Consultation

The team made the presentation on each island's management plan and to pick their main priority of their management plan in order for the donor (TFSP) to fund the assistance needed.

#### 4.2.1 Nanumaga Community Consultation

The consultation was held at *Faihouloto Maneapa* on the **21<sup>st</sup> of September**. The discussion was constructive as the audience were actively involved in giving out their thoughts and comments on the issues listed in the management plan. The ballot was made to select which issue would be their main priority. The community made a unanimous vote on "*He lava o peeki fakahao ola*" to be listed as the main priority to be funded.

#### 4.2.2 Nanumea Community Consultation

The consultation was held at *Nameana II* on the **28<sup>th</sup> of September**. The audiences were mostly fishermen, elders and *Kaupule* that gave their thoughts on the management plan. The audience laid out their comments and issues in the listed management plan. Discussions were constructive as to which issue need to be their main priority. The community agreed on the issue "*Heai ne poe fakalata ika* (Near-shore FADs)" to be listed as the main priority to be funded.

#### 4.2.3 Niutao Community Consultation

The consultation was held at *Fetu Afiafi 3* on the **12<sup>th</sup> of October**. The audience comprised of elders, fishermen and *Kaupule* members that gave their views on the management plan. There were some issues regarding on the listing of their management plan. Discussions and criticism were constructive. The discussions were intense that the community was not satisfied with the number of issues listed in their management plan. The audience created a new issue within the Management Plan to include FADs. The ballot was made and the community agreed to have FAD's to be their main priority.

### 4.3 Ciguatera Fish Poisoning Case Update

Several of the fisheries officers paid a visit to the health centers for each island. The officers noted down the number of cases. Here are the cases below for each island:

**Table 4.3a shows the number of cases of CFP for each island in the North**

Islands	Number of Cases
Nanumaga	0
Nanumea	0
Niutao	0

From the given table above, this shows that there were no cases in the Northern group of Tuvalu as of date.

#### 4.4 Boat & Canoe Survey

The whole team was involved in the survey in recording the Boats and canoes coordinates and condition of boat or canoe in the island. Here are the results for each island listed below. (Include the conditions for each of the Boat & Canoe)

**Table 4.4a shows the Boat and Canoe counts from Nanumaga**

Aluminum Boat	Aluminum Canoe	Wooden Canoe	Wooden Boat	Fibreglass Boat
28	12	21	0	0

**Table 4.4b shows the Boat and Canoe counts from Nanumea**

Aluminum Boat	Aluminum Canoe	Wooden Boat	Wooden Canoe	Fiberglass Boat	Plastic Boat
19	8	6	54	2	1

**Table 4.4c shows the Boat and Canoe counts from Niutao**

Aluminum Boat	Aluminum Canoe	Wooden Boat	Wooden Canoe
11	3	0	20

From the three tables given above, these are the actual counts that have been measured and marked its coordinates.

#### 4.5 LMMA Activity

Visiting the LMMA's of the three islands in the northern division of Tuvalu is crucial. It gives a clear picture of the LMMA's whether there has been changes over time or not. These refers to direct or indirect changes that occur naturally to the LMMA environment and also the effort done by the island Kaupule, Falekaupule and the community.

On Nanumaga Island, Fisheries officers consulted with the Nanumaga Kaupule officers about the Nanumaga LMMA's before they visited the sites. The Nanumaga Kaupule officer expressed that there have been no changes made to their LMMA's since the fisheries officers last visit during their metronome trip to Nanumaga island. It was confirmed by the four fisheries officers who went to visit the sites. They also found out that these places have not been marked out to show the boundary of their LMMA. In addition, there are some fishing methods are allowed in the Nanumaga LMMA by the island FaleKaupule. For instance, Fishing rod (Sisi, sau, kofe vili), Hand lining (lafolafo). However, spearfishing (sana) is prohibited all around the Nanumaga coastal area and the Hapai pond.

On Nanumea Island, Fisheries officers also consulted with Kaupule members regarding their LMMA's. Since, most of the Nanumea LMMA's are located on islets where there are few people could access. The metronome team leader Mr. Maani Petaia asked permission from the Kaupule for the team to enter Nanumea LMMA's. When the Kaupule gave permission to visit their LMMA's, the LMMA officer and the Nanumea data collector Mr. Tonia Auala visited the LMMA's. They found out that the island LMMA's boundary have been marked by the Kaupule staffs with PVC pipes, painted with red stripes. Both, on patch reef and on land. Furthermore, the island community had cleared the bushes across the islet and create a new road from one pole to another which demarcate the boundary of the terrestrial area on Lakena islet. Moreover, spearfishing is prohibited in the Nanumea lagoon.

The fisheries officers consulted with the Niutao Kaupule regarding their LMMA's. The LMMA officer, together with the Niutao data collector Mr. Tiloua Kapui visited the LMMA and found out that there has been no changes made to island LMMA. Timber post and board were used by the Kaupule staffs to mark the boundary of the Niutao LMMA. However, the board is old and there is

nothing left to read. Furthermore, in the team last consultation with the Kaupule, the LMMA officer asked the Niutao Kaupule for their understanding in the creation of the MPA on Niulakita Island. They confirmed that there is no such thing that has been brought to their attention and it also has not been brought for discussion in the Niutao FaleKaupule. Hence, there is no MPA in Niulakita except the LMMA.

Despite Nanumea and Niutao has delineated the boundary of their LMMA's, the three island needs proper demarcation of their LMMA's. On land, it would be better if strong posts placed with notice boards that say 'Koga tapu or Kogaatai puipui' (conservation coastal areas or LMMA). Offshore, it would be better if floating buoys are placed to mark the boundary of the LMMA'S. The idea is to make a transit bearing with the buoy and the on land mark to delineate boundaries of LMMA's.

#### 4.6 "Moto" Assessment in Nanumaga

The team from the Resource Assessment & Monitoring sub-section collected 4 samples of the *Moto* at Ha'apai. The samples were placed in the vials containing brine solution. The samples will be later analyzed in the Fisheries Department's lab.

#### 4.7 Manta Tow Activity in Nanumea

The team from Resource Assessment & Monitoring sub-section was involved in counting of Beche-De-Mer within the Nanumea Lagoon. The team consisted of a senior officer (SFO – Resource Assessment & Monitoring), and three fisheries officers. The table below shows the counts of BDM and its diversity:

**Table 4.7a showing the counts of BDM found in Nanumea Lagoon.**

Sea Cucumber/BDM Species	Counts
Lollyfish ( <i>Holothuria atra</i> )	2289
Leopardfish ( <i>Bohadschia argus</i> )	5

**\*Distance covered: 13,500m**

These counts would be used to establish the Sea Cucumber National Management Plan. However, Nui in the central is the only island with a lagoon that left to be surveyed.

#### 4.8 Other Activities

##### 4.8.1 Awareness Program

The fisheries team had presenters that present topics related to managing of marine resources. The topics covered on: "**Importance of LMMA & MPA**", "**Issues of Overfishing**" and "**Sea Safety of Fishermen**". The team included in reporting back the Creel Results on each island. The officers who presented were: Maani Petaia, Lavata Nivaga, Filipino Makolo and Pafini Fepuali.

##### 4.8.1.1 Community Awareness

###### 4.8.1.1.1 Nanumaga

The awareness program commenced on the 21<sup>st</sup> of September held at *Faihouloto* Meeting Hall. The community were actively involved during the discussion. Comments and discussion were highlighted as listed below:

- Training on Size Limit needed in order to understand the fish maturity length and spawning season.
- Fish population in LMMA site is slowly deteriorating recently.

###### 4.8.1.1.2 Nanumea

The awareness program commenced on the 28<sup>th</sup> of September held at *Nameana II* Meeting Hall. The community was actively involved in the discussion of the topics delivered. Comments and discussion were highlighted as listed below:

- An actual list of fish size that were commonly caught in Nanumea
- Refresher on Sea Safety equipment – Life Jacket

#### 4.8.1.1.3 Niutao

The awareness program commenced on the 12<sup>th</sup> of October held at *Fetu Afiafi 3* meeting hall. The community gave their thoughts on each topic during the presentation. Comments and discussion were highlighted as listed below:

- An actual spawning season for each fish and actual maturity length.
- Procedure of creating the MPA
- Sea safety equipment to be replaced – replacing the expired sea safety products

#### 4.8.1.2 School Awareness

During the school awareness, the fisheries officers presented to the school students and staff. The team provided school incentives as gifts for the school from the fisheries. Pop quizzes were offered to students to know the students' attention span.

##### 4.8.1.2.1 Nanumaga

The program commenced on the 22<sup>nd</sup> of September held at *Lotohoni Primary School*. The students were from the senior classes from Class 6 to Class 8 together with their class teachers and staff. The staff members raised some comments and queries based on topics that the presenters presented. The comment made from the staff was highlighted:

- Recent cases of fishing vessels found near or within the LMMA sites (Oceanside).

##### 4.8.1.2.2 Nanumea

The program commenced on the 29<sup>th</sup> of September held at *Kaumalie Primary School* Computer Lab. The students were from the senior classes from Class 7 to Class 8 together with their class teachers. The students were attentive to the program and were able to grasp the knowledge of managing marine resources and sea safety of fishers.

##### 4.8.1.2.3 Niutao

The program commenced on the 14<sup>th</sup> of October held at *Webley Primary School*. The students were from the senior classes of Class 6 to Class 8 together with their class teachers. There were some constructive queries from the staff members. Here are the highlighted comments given below:

- Ownership of the MPA
- LMMA's effectiveness on fish growth population
- Spawning season for fish

The staff from *Webley Primary School* made a request to look into the coastal resources in looking at the LMMA areas and assess the marine resources.

### 4.8.2 O IDC Refresher Training & Consultation

#### 4.8.2.1 Nanumaga

The O IDC Refresher Training was unsuccessful as there was a busy schedule for the Data Collector and the fisheries team. However, the officers managed to provide the essentials to the Nanumaga Data Collector.

#### 4.8.2.2 Nanumea

The Data Collector was aware on the Creel Datasheet and its content. Issues were noted from the Data Collector on the challenges he faced when doing the Creel Survey. Issues were highlighted below:

- Payment issue
- Negotiating with fishers

- Only surveyed when the catch was larger
- Difficulty in allowing the Data Collector to survey the catch from fishers
- Assistance needed to do the survey
- Motorbike not functional and need maintenance check from the Fisheries Department workshop.

After the consultation, the Nanumea Data Collector received copies of Fortnightly Report template, Creel Survey Datasheets.

#### 4.8.2.3 Niutao

The Data Collector was informed on the Creel Datasheet and its content. Issues and challenges were noted from the Data Collector during the Refresher Training. Issues were highlighted below:

- Pay issues
- Unable to do creel survey alone

#### 4.8.3 Grab Bag Inspection & Refresher Training

Inspection and a refresher training (on the usage of safety gears in the Grab Bag) was made on the 23<sup>rd</sup> September 2021 to Nanumaga, Nanumea on the 6<sup>th</sup> October 2021 and lastly Niutao on the 13<sup>rd</sup> October 2021. This is to effectively inspect the status of Grab Bags for each island part of its activities under Annual Work Plan 2021 to ensure the safety of fishermen were well equipped and the wisely used of their safety gears (grab bag) at sea.

The purpose of the trip was to primarily accomplish one of the activities under Fisheries Work Plan, to do the grab bag inspection once in a year for each fishermen association which include the following;

1. Individually Inspects each equipment in the grab bags;
2. Refresher training;
3. Recommendations to improve the movement of the association in terms of sea safety,

This report will highlight the inspections result for each fishermen with their grab bag, issues and challenges faced by each fishermen and the recommendation to improve the movement of the association in terms of their safety at sea.

##### 4.8.3.1 Grab Bag Result and Discussion

The result inspection were shown below from each association, and this report will discussed issues and challenges encounter during this inspection and refresher training;

Table 4.8.3.1a: Shows Nanumaga Grab Bags inspection results

Safety gears	Damage	Lost	Broken	Status/Comment
PLB	1			SN – 10219 not working
Strobe light	1	2		1 not working and 2 lost
Medical kit		1		Lost
Laser flare	1			Not working
VHF	2	3	1	2 not working, 3 lost 1 broken aerial
Sea anchor	1	2		1 damage, 2 lost
Map compass		1		Lost
Spare batteries		9		No spare batteries
Blanket		1		Lost
Thermal Bag		1		Lost
GPS	2	4		2 not working, 4 lost

Table 4.8.3.1b: Shows Nanumea Grab Bags inspection results

Safety gears	Damage	Lost	Broken	Status/Comment
Strobe light	3		1	3 not working, 1 broken lid
VHF		1		Lost
Map compass		1		Lost
Spare batteries		5		No spare batteries
Blanket		1		Lost
Thermal Bag		1		Lost

Table 4.8.3.1c: Shows Niutao Grab Bags inspection results

Safety gears	Damage	Lost	Broken	Status/Comment
PLB	2			1 used/ 1 no power
Strobe light	2			Not working
Laser flare		1	1	1 Lost, 1 Broken lid
Streamer		1		Lost
VHF	7		3	6 not working, 1 broken antenna, 3 charger broken
Sea anchor	1	1		Used
Life Jacket		1		Lost
Map compass	1			Broken mirror
Spare batteries		10		No spare batteries
GPS	2			Not working

Tables above showed the inspection result from the 3 island (Nanumaga, Nanumea and Niutao). The inspection was done by TFD officers (3 officers from Coastal and 1 from O&D) to effectively inspected each safety gears to make sure they were safe to use.

As a result the inspection found out that,

- 1) PLB – All PLB were expired in the month of May 2021
- 2) Medical kits - All expired in 2016 – need replacement
- 3) Most of the safety gears getting rotten and not working.

#### 4.8.3.2 Refresher Training

Refresher training was designed to refresh each fishers on how to use each safety gears in the grab bag. The following were the activities and outcomes during this refresher training;

- 1) Successfully refresh each fishers with grab bag the use of each safety gears in the grab bag,
- 2) 25 bags successfully inspected (9 bags in Nanumaga, 5 bags in Nanumea and 11 bags in Niutao. Which a total of 16 bags donated for each island).
- 3) Fishers understand the 3 different meaning of light activation of the strobe light in terms of communication,
- 4) Practical – participant showed interest and learnt the used of each safety gears.

#### 4.8.3.3 Issues and Challenges

- 1) 1 grab bag from Nanumaga in Nui
- 2) VHF not strong enough for communication in terms of emergency during fishing incidents,

- 3) 6 bags in Nanumaga, 11 bags in Nanumea, 4 bags in Niutao did not turn up for this inspections and refresher training,
- 4) Proper design for the grab bag, to make sure safety gears inside were not getting wet due heavy rain and others,
- 5) Additional VHF to make it 2 in the grab bag for communication purposes,
- 6) Fishers need to refresh every year on the use of each safety gears.

## 4.9 FADs Maintenance & Update

### 4.9.1 Nanumaga FADs Status

**Figure 1: Nanumaga FADs**



On the 25<sup>th</sup> September 2021, 3 TFD officers assessed the FAD and aggregated (2 officers from Coastal and 1 officer from Operation and Development) with FAD coordinates **Latitude 06°16.649' S / Longitude 176°18.679' E**. the team aggregated the FAD with coconut leaves, this allowed small fishes to protect themselves by sheltering under those coconut leaves. Thus, attracted big fishes into the FAD. After aggregating the FAD, the team dived down about 40 meters depth to check the main line to the anchor. As a result the main line was still in good conditions.

### 4.9.2 Nanumea FADs Status

There were no FADs in Nanumea.

### 4.9.3 Niutao FADs Status

There is a FAD in Niutao, however it is gone underwater and cannot be inspected.

### 4.9.4 Issues and Challenges

After FADs inspection and maintenance, the following were the issued and challenges faced;

- 1) No proper safety gears to protect divers from dangerous marine mammals
- 2) No aggregation of the FADs
- 3) Additional attachment to the FAD like fishing net, pallet and others,
- 4) No underwater camera and
- 5) Plenty sharks.

### 4.9.5 Recommendations

- 1) TFD to provide proper safety gears for divers to fully protect themselves from any dangerous marine mammals,
- 2) Encourage Fishermen Associations to aggregate FAD
- 3) Fishermen Associations 111and each fishers to properly look after their FAD.

## 5.0 Issues & Recommendations

The team encountered challenges during the Metronome trip. The challenges were highlighted as listed below:

- Unable to answer questions based on Fishing Vessels (Purse Seine & Longline) activity.
- Lack of knowledge on size limit
- Unable to complete the activities on some islands in the North.
- Questions were too broad from the community consultation and needed to be within the range from the Officers' field of expertise
- Activities were changed due to public holidays (Tuvalu Independence Day)
- During the team's return to Funafuti, there was no cook onboard the *FV Manau II*. That created a problem as the team needs the cook during the long journey.

Recommendations were made in order to lessen the issues that the team faced when travelling to the North Island group next time. Here are the recommendations listed:

- The team will try to let the officer from the Oceanic Section to join the team in order to answer some queries based on Fishing Vessel activities.
- Training would commenced anytime soon on the Size Limit so the officers can fully understand.
- Arrange a proper time with the Data Collectors and negotiate in ways to meet with Data Collector. Also, other activities that need to be fulfilled before heading to the next island.
- Adapt to the sudden change when public holidays or community events occur and arrange the changes of the tentative program.

## 6.0 Appendix

### 6.1 Seafood Poisoning Report Form



## SPC Seafood Poisoning Report Form

This is an electronic form. Please fill the fields or check the boxes using your keyboard and mouse. Text fields will expand to accommodate any amount of text, so do not worry if the space for your answer seems small.

### Report Form

Details of person filling in report form	
Name	Job/Position
Contact Address	
Date	Signature

Poisoned person's details		
Name	Sex (M/F)	Age (yrs.)
Address		

Details of the seafood that caused the poisoning (tick all that apply)				
Type of food	Where caught	How preserved	What eaten	How eaten
Fish <input type="checkbox"/>	River <input type="checkbox"/>	Fresh, no ice <input type="checkbox"/>	Head <input type="checkbox"/>	Raw <input type="checkbox"/>
Crab <input type="checkbox"/>	Mangrove <input type="checkbox"/>	Fresh, iced <input type="checkbox"/>	Flesh <input type="checkbox"/>	Marinated <input type="checkbox"/>
Lobster <input type="checkbox"/>	Beach <input type="checkbox"/>	Frozen <input type="checkbox"/>	Skin <input type="checkbox"/>	Cooked <input type="checkbox"/>
Other crustacean <input type="checkbox"/>	Patch reef <input type="checkbox"/>	Salted <input type="checkbox"/>	Liver <input type="checkbox"/>	
Gastropod <input type="checkbox"/>	Lagoon <input type="checkbox"/>	Dried <input type="checkbox"/>	Roe <input type="checkbox"/>	<b>How many others:</b>
Bivalve <input type="checkbox"/>	Outer reef <input type="checkbox"/>	Smoked <input type="checkbox"/>	Other <input type="checkbox"/>	Ate this meal?
	Ocean <input type="checkbox"/>	Pickled <input type="checkbox"/>	Specify:	Felt sick?
Other mollusc <input type="checkbox"/>	Other <input type="checkbox"/>	Other <input type="checkbox"/>	Specify:	Were admitted to hospital?
Specify:	Specify:	Specify:	Specify:	

Unknown <input type="checkbox"/>	Unknown <input type="checkbox"/>	Unknown <input type="checkbox"/>	Unknown <input type="checkbox"/>	Unknown <input type="checkbox"/>
What is the local name of the seafood?				
What is the English name of the seafood?				
Name of vendor or restaurant (if bought)				
Name of the place it was caught (if known)				
When was the food eaten?	Date:	Time:		
When did you first feel sick?	Date:	Time:		

**Symptoms (tick all that apply)**

Burning or pain when touching cold water <input type="checkbox"/>	Pin pricking sensation on touching water <input type="checkbox"/>	
Tingling or numbness <input type="checkbox"/>	Strange taste in mouth <input type="checkbox"/>	
Difficulty or pain urinating <input type="checkbox"/>	Skin itching or red <input type="checkbox"/>	
Difficulty breathing <input type="checkbox"/>	Excessive salivation <input type="checkbox"/>	Fever / chills <input type="checkbox"/>
Difficulty walking <input type="checkbox"/>	Excessive sweating <input type="checkbox"/>	Headache <input type="checkbox"/>
Difficulty talking <input type="checkbox"/>	Diarrhoea <input type="checkbox"/>	Joint aches <input type="checkbox"/>
Eye irritation <input type="checkbox"/>	Vomiting <input type="checkbox"/>	Muscle cramps <input type="checkbox"/>
Others:		

**History**

Have you had seafood poisoning before?	Yes <input type="checkbox"/>   No <input type="checkbox"/>			
How many times?				
Details	When?	Type seafood	Hospital?	How long to recover?
Case 1			Yes <input type="checkbox"/>   No <input type="checkbox"/>	
Case 2			Yes <input type="checkbox"/>   No <input type="checkbox"/>	
Case 3			Yes <input type="checkbox"/>   No <input type="checkbox"/>	
Case 4			Yes <input type="checkbox"/>   No <input type="checkbox"/>	
Case 5			Yes <input type="checkbox"/>   No <input type="checkbox"/>	

Case 6			Yes <input type="checkbox"/>   No <input type="checkbox"/>	
Anything you remember about past poisoning?				

**Medical data**

Pulse:	Blood pressure:     /	Pupils:
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**In case of death**

Date of death:

Autopsy findings:

Other information:

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## Local Knowledge and Background Data

Survey Questionnaire No. \_\_\_\_\_/\_\_\_\_\_

Details of person filling out this form	
Name:	Job/Position:
Contact Address:	
Date:	Signature:
Details of the person interviewed (optional)	
Name:	Sex (M/F): Male <input type="checkbox"/>   Female <input type="checkbox"/>
Age (years):	Ethnic Group:

Questionnaire (tick the boxes where appropriate or fill in the blank spaces)	
1. Are you aware of any previous cases of food poisoning from seafood products among your family and friends?	Yes <input type="checkbox"/>   No <input type="checkbox"/>
2. If so, could you give a rough estimate of the number of such cases of food poisoning?	
Yes <input type="checkbox"/>   No <input type="checkbox"/>	If yes, how many?
3. Have there been periods or years in which the number of cases has been higher?	
Yes <input type="checkbox"/>   No <input type="checkbox"/>	If yes, when?
How would you explain this?	
4. What are the most frequent symptoms of the people who have such food poisoning?	

5. Which seafood products were supposed to have caused this seafood poisoning?

Fish  What type of fish?

Other  What type of seafood?

Don't know

6. Where are the toxic seafood products most often caught?

Ocean  | Lagoon  | Others  Specify:



Please return this form to: The Tuvalu Fisheries Department. Thank you.



Comments and observations				

FENVAL



**SPC INVERTEBRATE SURVEYS**  
**MANTA TOW - if found pls return to: BP D5 98848 Noumea Cedex New Caledonia**

				DATE	Pg
	<b>WPT START</b>	<b>DISTANCE</b>	<b>WPT FINISH</b>	<b>SPEED</b>	<b>TIME START:</b> <b>MAPS &amp; NOTES</b>     <b>TIME FINISH:</b>
1					
2					
3					
4					
5					
6					

	<b>WPT START</b>	<b>DISTANCE</b>	<b>WPT FINISH</b>	<b>SPEED</b>	<b>TIME START:</b> <b>MAPS &amp; NOTES</b>     <b>TIME FINISH:</b>
1					
2					
3					
4					
5					
6					

	<b>WPT START</b>	<b>DISTANCE</b>	<b>WPT FINISH</b>	<b>SPEED</b>	<b>TIME START:</b> <b>MAPS &amp; NOTES</b>     <b>TIME FINISH:</b>
1					
2					
3					
4					
5					
6					

### 6.4 LMMA/MPA in the North (????)

Figure below shows the map of Nanumaga Island and the LMMA's.



Figure below Shows the map of Nanumea Island and indicate the locations of LMMA's and terrestrial protected areas.

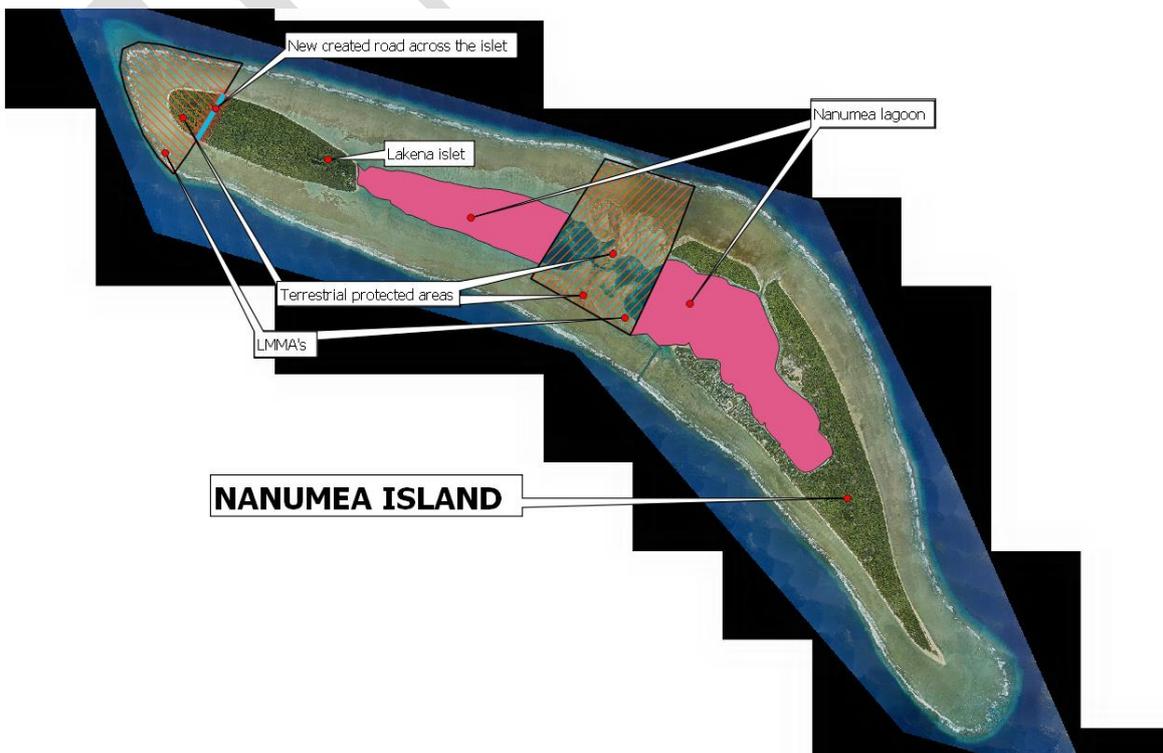




Figure above is the Nanumea data collector Mr. Tonia Auala standing beside and holding the land mark indicating the LMMA boundary on Lakena islet.



Figure above shows a PVC beacon installed on a patch reef to mark the LMMA boundary in the Nanumea lagoon.

Figure below shows the Niutao map and their LMMA.



Figure above shows the Niutao data collector (Mr. Tiloua Kapui) stand and hold one of the land mark that indicate the boundary of the Niutao LMMA.

## 6.5 Minutes

### 6.5.1 Nanumaga

#### Minutes

**Date:** 17/09/2021

**Time:** 1510

**Venue:** Nanumaga KPL Office

**Event:** Opening Consultation

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#### Activities

1510

- Taimoe welcomed the team for arriving safely
- Passed the floor to Maani
- Maani briefly outlined the program for today
- Paka made an opening prayer

1512

- Each team member introduced themselves to the Kaupule members
- Maani mentioned the duration for team's stay – 9 days
  - He mentioned that the next day (18/09) that's when the work begins from the metro team.
  - He mentioned that the Kaupule members have the right to change the team's activities if there's something arose on that day.
  - He briefly explained the Management Plan and was told that the Management Plan was extracted in looking at Fisheries-related issues
    - He further explained that the NZ Donor was willing to contribute AUD\$10K.
  - He briefly explained each activities that were expected to execute.
    - He explained that there's a training on Post-Harvest that would be conducted by the O&D Section
      - Pafini apologized to the Kaupule members that the training would be highly unlikely to happen due to the pending arrival of the cargo vessel.
    - Maani mentioned on Cargo vessel that delayed the training and mentioned that it won't happen again.
  - Maani mentioned that he wanted to do collection of samples on the "Moto".
    - He added that since the Post-Harvest was unlikely to happen then the collection of the "Moto" could be added.
  - He mentioned the school awareness would happened on Wednesday (22/09).
    - He added that if the collection of the Moto was not completed then the team would continue on that day.
  - He mentioned on the Grab Bag assessment and OIDC Refresher Training happening on Thursday (23/9).
  - He discussed on the FADs Inspection and mentioned the responsible officer.

- He mentioned on the final day, the team would provide the results of the team's stay in Nanumaga.
- He passed the floor to the Kaupule to discuss on the Tentative Program.

1529

- Taimoe mentioned that the Minister's team were here and had a program prepared on Monday (20/09).
- Paka commented on the Monday's program clashing with the meeting with the Minister.
- Isopo commented on the MV Nivaga III that would be arriving to Nanumaga soon. He mentioned that the team could depart on Sunday but it had to be early in the morning around 6 AM.
- Sikiga commented on the survey and the team could slot their activities.
  - He mentioned that the meeting with the Minister could clash the Monday's activity. He would look into that program further.
  - He mentioned on the survey of the Moto; he gave the approval for the team to assess the Moto species.
  - He mentioned on the Sunday's departure; prohibited in times 0900 – 1500.
- Taimoe commented on the Monday's activity and mentioned on the TFSP.
  - She added on the special report to deliver from the metro team.
- Taimoe passed the floor to Maani.

1541

- Maani passed the floor to Matapua to discussed on the TFSP
- Matapua clearly outlined the purpose of the NZ Donor
  - She mentioned that the NZ Donor was interested in looking at their first priority listed in their management plan.
  - She mentioned that there's no criteria needed.
- Taimoe thanked Matapua for clear description of the TFSP purpose.
- Maani thanked the Kaupule for the constructive discussion. He proposed to switch the activities on Monday's activity to Tuesday and vice versa.
  - He received notice that the boat would be arriving around Monday or Tuesday.
  - He mentioned that the boat is picking a team up from VTP on Saturday.
- Passed the floor to the KPL.

1547

- Sikiga gave the approval to Maani's proposal.
- Pafini proposed on the Grab Bag's activity to commence on Thursday night.
  - Sikiga approved to Pafini's proposal.
  - Pafini mentioned on how to reach out to the fishers?
    - Sikiga answered that the KPL would give an announcement to the community. "*Te kalaga*"
  - Maani asked if there's a time for the KPL to meet with the team
    - KPL answered around 9 or 10.

1551

- Taimoe laid out the protocols:
  - No drinking on Sundays
  - Mindful of the bell time.

1552

- Taimoe concluded the meeting by thanking the team.
- Isopo made the closing prayer.

1554

- Kaupule Consultation concluded.

### Minutes

- **Date:** 21/09/2021
  - **Time:** 0925
  - **Venue:** Faihouloto
  - **Event:** Nanumaga Community Consultation & Awareness
- 

### Activities

Time 0950

- Failautusi ote KAupule and the MC for the day (Taimoe Faitalia) gave an opening remark. Gave the floor to Talepa (PuleFenua), Pulefenua officially open the the day and asked the Tiakono Toeaina to open the day with a prayer.
- MC gave the floor to the Fisheries Team. Maani introduce himself and everyone on the team did the same.

1000

- Maani: Gave an introduction for Nanumaga to select 1 Fisheries Priority issue on the 2017 Management plans to be funded under the TFSP \$10,000 and gave Hetoa the privilege to brief the Nanumaga Fisheries issues on the Management Plan.'
- Hetoa briefly explained the details on each priority mentioned below.
  - Fisheries related Issue 1: Not enough grab bags for each fisher
  - Issue 2: FADs wear off or drifted
  - Issue 3: Reef fishes depletion/decrease in number
  - Issue 4: Boats/ ships anchor anywhere
  - Issue 5: Secure Haapai species from poachers
  - Issue 6: To culture an edible reasonable size shrimp on the Haapai / Avatahi instead of the small size Nanumaga had now
  - Issue 7: Vaka Faika fished near shores
- Lotelika asked that Nanumaga needed more grab bags where a \$10K couldn't afford, Pafini explained that the O&D section have ordered new bags for each island and

- Puleisili raised that he posed the 2<sup>nd</sup> issue to provide more FAD.
- Taimoe reminded the community to consider their priorities on the recent ISP
- The vote is unanimous on the Issue 1, Grab Bags, the discussion went on whether the island use \$10000 for the whole bag or for some recommended important pieces.
- Sikiga mentioned that the Kaupule contribute in another \$10,000 from Kaupule funds to ensure more than 10 pairs of the 3 pieces (PLB, VHF and the GPS) The Kaupule \$10,000 is for fisheries development work. Therefore an amount of \$20,000 in total to fund sets of only the mentioned pieces.
- Everyone agreed

1120 10 minutes break

1136

- Maani started his presentation on the creel report for Nanumaga. Since 2017 -2018 there was a decrease in fish sizes during creel survey. Maani mentioned all the difference in sizes and the amount of fishes that were caught in the past few years. However he briefly described all the challenges and the possible ways to overcome and to solve the mentioned issues during the survey.
- Taimoe asked if there is a mentioned of overharvesting in the report or the work of the data collector.

1150

- Matapua answered that the DC's work is to collect data, it's the Fisheries job to state the issue of overharvesting during this type of awareness program. So it is vital for Nanumaga to carefully consider the presentation and look for ways to solve issues raised on the presentation.
- Sikiga asked on the size limits, how a person knows the size to fish or the size that has been over spawning size. Maani answered that the Fisheries have a size limit ruler that a fisher can see the harvest size for reef fish that are caught.

1155

- Puleisili asked if there is a sight in Nanumaga that fish caught are poisonous? Paeniu answered that the Fisheries worked together with the Hospital to note the amount of people caught poisonous from fish, so far Nanumaga have no CFP cases since 2019. Therefore it is now considered that G.Tox is less these days.

1157

- Lavata Presented on LMMA area and MPA for only Nanumaga. He also mentioned the use of the technique spill over when community consider having MPAs and LMMAs and enforce to ensure spilling over of fishes.
- Opetā, there is a say that sometimes somewhere, the MPAs marked and there are no fishes inside, WHY there is no fishes there?

1205

- Paeniu answered that the question is very difficult, but there are some mentioned of if there are corals in the reef there should be fish around, No corals No fishes, but there are other factors as well that can cause the very idea of no fishes around.

1207

- Pafini presented on SEA SAFETY. He mentioned the use of the 5 minutes preparation before going out fishing. Pafini also talked on the impact of not considering the 5minutes preparation. He mentioned the steps for prior preparation before a fishing trip, ideas on checking the weather, taking with them their grab bags in case of problems at sea, check the outboard motor and also tell someone you trust or family the plan and place of the fishing trip.

1214

- Opeta elaborate that it is a very useful reminder the presenter presented especially to all fishermen to consider and be reminded of during a fishing trip.
- Maani gave the floor back to the MC and remind the community for a group photo before lunch.

1217

- MC Taimoe recap the importance of the program today and to keep reminding the community of the use of keeping their resources well. She insist that 2 speakers only can speak before the group photo, the Pule Fenua, and the Tiakono Toeaina for a closing prayer and grace.

1221

AWARENESS ADJOURNED.

- Comment from Nanumaga KPL – Report back.
- Tamaliki akoga e lasi kii te fiafia o olo o sisi, e mata e isi se fesoasoani ke mafai atili te iloa o tamaliki akoga konei, mea faika kesekese?
- Post-Harvest Training ke mafai loa o isi e fai ite sua Malaga
- Sampling kiluga I togo ke mafai o fai ite sua Malaga.

### Minutes

Date: 22/09/2021

Time: 1039

Venue: Lotohoni Primary School

Event: Awareness Program - School

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#### Activities

1039

- Program commenced with Maani giving an opening statement about the awareness program
- Each team member introduced themselves

1044

- MP outline for today's program.
- Passed to the first presenter: Lavata Nivaga

- Lavata presented on the importance of LMMA and MPA
  - He gave the differentiation of LMMA and MPA and its function
  - Gave a short quiz on what was LMMA's function.
  - He described the map of Nanumaga and its allocated sites of LMMA and Special Protected Area.
  - He discussed on the benefits of having LMMA/MPA established
  - He discussed on the disadvantages of not having LMMA/MPA
  - He talked on the solutions ways to conserve marine resources
  - He concluded his presentation by summarizing the presentation.
  - Floor opened for discussion.
- Agatonu asked on fishing vessels. He wanted to know if the fishing vessels have entered within the LMMA boundaries in Nanumaga.
  - LN answered that there's a section in Fisheries that oversees the fishing vessel's activities in Tuvalu
  - MP added on that there's a procedure that the fishing vessel have to abide to. If the fishing vessel was caught in fishing close to the LMMA of the island, the fishing vessel will be penalized heavily.
- Lavata gave a pop quiz
  - Long form for LMMA – Form 2
  - What's the name of the site that have LMMA – Class 6
  - Name one fish
- Lavata ended his presentation and passed to the next presenter – Filipino Makolo

1058

- Filipino presented on Issues with Overfishing
  - He compared the differences in fishing boats, fishing method and technology.
  - He then compared the differences of fish size in different time periods of 1965, 1985 and 2015
  - He gave an example of the human population then he relate his example on fish spawning.
  - He talked on ways to conserve marine resources like having LMMA, Spawning sites, License issued, Creel and inspection of fishing gears.
  - He talked on the Fish Size sticker
  - He gave recommendations on what the students can do to help conserve marine resources.
  - He concluded his presentation
- Floor was opened for discussion
- No queries from the audience
- FM made a pop quiz
  - State one technique on ways to control overfishing

1109

- MP passed to the last presenter: Pafini Fepuali
- Pafini gave a pop quiz
  - What's the common issue that currently happening to marine resources
  - Pafini explained the issue on overfishing and impacts on overfishing
- Pafini presented on Fishermen Sea Safety

- He talked on the 5-minute method in rescuing fishers lost at sea
- He talked on the disadvantages of having a 5-minute method
- He talked on ways the students could help with fishers by:
  - Weather update
  - Informing relatives and friends
  - Checking of fishing gears and grab bags
  - Boat check
- He concluded his presentation by summarizing the importance of sea safety
- Floor was opened for discussion
- No queries were made so a pop quiz was made
  - State one technique to protect fishers prior to fishing

1120

- Maani thanked the students and staff for participating in the awareness program
- Maani mentioned that the fisheries team have brought the school incentives to be gifted to the school.
- Matapua handed over the school incentives to the Staff of Lotohoni Primary School.
- Elia gave a vote of thanks to the team and its contribution
- Group photo commenced.

1127

- Program ended

**Minutes****Date:** 25/09/2021**Time:** 1521**Venue:** Kaupule Office - Nanumaga**Event:** Kaupule Consultation - Closing**Activities**

1521

- Taimoe gave an opening statement by welcoming the team for the consultation.
- Paka gave an opening prayer

1523

- Matapua briefly explained for the program for today – Reporting of the Team’s Activity
  - Briefly outlined the topics from the report presentation
  - She reported on the community consultation and the funding on procuring the Grab Bags.
  - She reported on the Ciguatera Fish Poisoning Case Updates and Boat & Canoe.
    - Explained the purpose of Boat & Canoe
  - She reported on the *Moto* Sample Collection results

- Lavata reported on the LMMA Activities
  - Nothing to be amended in the LMMA sites
  - He mentioned on the fishing methods used for fishing
  - He proposed to have a notice board to be placed to notify visitors on the LMMA sites
  - He proposed an activity that soon to be commenced next year in looking at the effectiveness of LMMA.
- Matapua reported on the awareness program for community and school
  - Community
    - Mentioned the highlighted comments and issues during that event like:
      - Training of Size Limits
      - Presence of fish within LMMA; slowly not appearing.
  - School
    - Mentioned the only issue raised from the staff of Lotohoni Primary School
      - Recent cases of fishing vessels fishing near the Nanumaga LMMA – Oceanside
      - Advised that the Oceanic Section (TFD) looked into this more detail.
      - She briefly explained on how to sight the fishing vessel and report it.
- Pafini reported on the Sea Safety & Grab Bag Inspection
  - He reported on the achievements made from that event
  - Issues that happened during the Grab Bag Inspection
- He reported on the FAD's Maintenance & Status
  - He mentioned on the issues like:
    - Noticed that there's a part of the FAD been removed or cut off
      - Causing it to have no fish appearing near the FAD
    - He advised that the section would look into installing the underwater camera.
- Matapua passed the floor to Kaupule to raise their thoughts on the report.

1551

- Isopo asked on the Moto and what the team would do with the samples
  - MF answered that the sample would be collected and get it analysed in Funafuti. The Moto would be report back soon once it was done analysed.
- Paka commented on Moto sampling and what that sample would be used when it was sent over to USP for analysis.
- Matapua advised on how to give a proposal in order for the fisheries team to research on their marine resources.
- She mentioned on the specific items for Sea Safety – GPS, VHF and PLB.
  - Paka commented on the Sea Safety items to be procured and fundings of it.
- Paka commented on the Canoe building project. Want to know about the canoes being built.
  - Matapua mentioned that the Nanumaga representative for Canoe Building was Matagofie.
  - Paka argued that there was someone else that he was supposed to go for the training.
- Natanielu asked if there a fiberglass material was been made recently.
  - Matapua answered that she was unsure on the fiberglass canoe.

- Natanielu clarified that he was referring to the other one (Drier)
- Matapua apologized for the unclear statement made before.
- Paka asked if the Fiberglass canoe need to be purchased by the Island.
- Pafini clarified it that the Fiberglass canoe was a project that the team assessed in 2020 after TC Tino. No need for purchase.
- Isopo asked on the FADs about the fish that swims near the buoy.
  - Pafini answered that the *Kamai* was commonly found near the FADs.
- Sikiga commented on the report especially on the Grab Bag funding from PROP.

1616

- Sikiga thanked the team's hardwork during their stay in Nanumaga
- Pafini added on the Grab Bag Inspection
  - He said that most bag were damaged
  - He added that there is a fund could fund those damaged/expired sea safety items and i.e. the Vessel Day Scheme (VDS) fund.
- Taimoe thanked the team and the Kaupule for attending the consultation.
- She mentioned that in the next visit the team could look into the use of mangroves and moto.
- Closing prayer commenced.

1622

- Consultation ended.

## 6.5.2 Nanumea

### Minutes

**Date:** 27/09/2021

**Time:** 1405

**Event:** Kaupule consultation - Nanumea

**Venue:** Kaupule Office

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#### Activities

1405

- The consultation commenced with Tofiga welcoming the team
- Opening prayer commenced

1408

- Kaupule member passed the floor to Maani
- Maani thanked the Kaupule members for allowing their time to consult with the team
- He briefly explained the purpose of the trip.
- Each member of the team introduced themselves to the Kaupule.

1413

- Maani displayed the tentative program for Nanumea.
- He allowed the Kaupule if there's a need to change in the program; able to change it according to the community's availability to the program.
- He explained the program for the week.
  - He talked on the community consultation and briefly explained the program.
    - He mentioned that the donor was willing to donate \$10K for the island when they have agreed which issue was their main priority that needed to be funded.
  - He talked on the Awareness Program and its difference
  - He mentioned on the Manta Tow activity and the build-up in creating a Sea Cucumber National Management Plan.
    - He requested for the Manta Tow activity to cover 2 days in surveying the Nanumea Lagoon.
  - He talked on the FADs Inspection
  - He lastly mentioned on the final Kaupule consultation in presenting the results of the team's findings in Nanumea before departing to Niutao.
- Floor was opened for discussion.

1422

- Vaipuna asked on the Friday's (01/10/2021) activity as it would clash the community event for the public holiday (Tuvalu Independence Day).
  - A Kaupule member commented the Friday's activity and might make some changes depending on the community's program for preparation for the Independence Day.
- Toai commented that the team's program deemed satisfactory and the team were here for the purpose. However, he mentioned that the team had to participate during the Tuvalu Independence Day.
- Vaipuna mentioned that it depends if the activities could be achieved before the Independence Day start.
- Maani mentioned that the Grab Bag Inspection would either be shifted to Thursday (30/09/2021), Saturday (02/10/2021) or Monday (04/10/2021).
  - The program have shifted on Monday
  - He mentioned that on the 1<sup>st</sup> October. The team would not engage any activities as the community would be busy preparing the activity.

1437

- Toai thanked the team for the program and also adjusting the programs based on the community's availability.
  - He mentioned that he was grateful for the team in not engaging any work activity during Independence Day.
- Maani thanked the Kaupule for constructive comments.
  - Maani raised an issue on the place where the team lived. Issue was on the water pump not functioning. Also, on the bike hire.

- Maani mentioned on the boat availability for Manta Tow as he needed for doing a survey.
- Maani passed the floor to the Kaupule
- Kaupule member asked other Kaupule members for any comments about that
- Tofiga commented on the issue that Maani rose on the water pump.
  - He wanted that problem to be solved quickly.
  - Tao mentioned that he would look into it after the consultation.
- Uoka made a closing prayer for the program.

1448

- Kaupule consultation ended.

### Minutes

**Date:** 28/09/2021

**Time:** 1300

**Venue:** Nameana II

**Event:** Nanumea Community Consultation & Awareness

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#### Activities

Time: 1316

1317

- Tofiga gave an opening remark and
- Tekava open the meeting with a prayer.
- Neia Tovia chair the meeting and gave the floor to the TFD (Maani) to start the consultation.
- Maani thanked the Falekaupule for the opportunity and let all officers from TFD to introduce themselves.

1320

- Maani, Paeniu, Pafini, Iakoba, Hetoa, Filipino, Lavata and Matapua and Sione all gave a brief introduction on their work profile.

1324

- Maani state that there are two session for today, the issue on the management plan continued with the awareness program, he also gave let Hetoa present on the prioritise issue from Nanumea on their management plan.

1326

- Hetoa presented the Nanumea Management Plan Fisheries related issues; 7 issues were described to the community as they have raised since 2017.
- Issue:
  1. A need for Near-shore FADs
  2. Fishing vessels fished near shore
  3. A need to control turtles or to conserve and limit the fishing of turtles

4. Decrease/ no fishes like (Panea, Kahi, Hahule, Kalea, Fahua, hoopu, ponuponu, tugage)
5. Depletion in the number seen recently – to conserve or control the species

1336

- Lenifoti: He wanted to raise 2 issue, 1<sup>st</sup> FAD and Fishing vessels & 7<sup>th</sup> is the LMMA issue, where people failed to control and abide rules of keeping the LMMA area. Toai supports Lenifoti's first issue on the FADs and mentioned a lot of good use of FADs.
- Simona asked what is the cause of the loss of FADs in Nanumea? Compare to other islands, their FAD is maintained and less issue on loss, but what is the problem with the FAD in Nanumea?

1341

- Maani answered we cannot say what really happened with the Nanumea FAD< but there is a possibility that the FAD was cut by fishing vessels for several reasons. It could also be our own boats. Toai also add that it could be the robes and chains. Lenifoti added on ideas of how to keep the FAD from being cutted.

1352

- Toai mentioned a type of robe that is essential for for FADs he had seen in Nauru that could attracts bivalves that attracts small fishes to the FAD and is big fishes.

1354

- Neia remind the community to look at the issues raised and vote on which one. Uiki supported the FAD issue in #1, Fatuasami asked how many FAD could the Fisheries donated for that amount. Pafini answered that there could only be 1 FAD a \$10K can afford. Sami added that it is a waste of money, we can afford a big boat with that amount, there were 2 lost FADs in Nanumea.

1400

- Tofiga says that if the FADs is voted first, it is best that the TFD make a brief survey on where the FAD will deploy, the depth, etc...to make sure we don't spend too much money for nothing. The Kaupule can also support from the fund from the VDS an amount of \$200K, Maybe Nanumea can deploy 2 or more FAD around the island. Alefaio asked if the FADs now have fender? The TFD officers are not sure if there are because Neli is not here to answer.

1414

- Maani presented on the Creel Report for Nanumea
- He introduced the report and the purpose of the presenting that.
  - He explained on the % fish landed that are undersized from 2016 – 2019
    - He compared the differences between 2017 – 2018 and 2018 – 2019
  - He explained number of fish and weight of fish per fisher per hour.
    - He explained the behavior of the line graph and the assumption that could be found from the graph.
  - He explained the number of fish caught and the weight of fish per fisher per fishing trip.
    - He explained the behavior of the line graph and the assumption that could be found from the graph

- He talked on the list of fish that were undersized were fished heavily. He mentioned that most of the fish were not yet at the stage for spawning.
- He talked on the challenges of Creel
- He concluded his presentation in summarizing the slides and also the impact of fishing undersized.
- Floor was opened for discussion
- Toai requested to list the fish that were in Red and deliver the list to the Kaupule so the kaupule members can make the policies on it.
- An elder asked on “Momea tapu” and ways to solve it
  - Maani answered that
- A fisher asked on how to differentiate between a male and female fish.
  - Paeniu answered that there are some fish that can be distinguished by colouration. Others could transition from male to female or female to male.
- Simona asked on the weight of fish caught and what’s the minimum weight for fish catch
  - Maani answered that that question was meant for the Oceanic Staff to answer as they would look into the minimum catch weight. He apologized for not answering the question.

1434

- Lavata Nivaga presented on the Importance of LMMA and MPA.
  - Briefly outlined his presentation
  - Explained the difference between the LMMA and MPA.
  - He explained the LMMA and Special Protect Area sites in Nanumea
  - Explained the benefits of establishing the MPA
    - Explained on the tourism for MPA
  - Explained the disadvantages of not establishing the MPA
  - Explained the solutions of it
  - He concluded on summarizing the presentation.
- Floor opened for discussion

1443

- A fisher asked on which policy that this topic referring to
  - LN answered the LMMA
- A fisher asked if there’s a size limit for fish.
  - Maani answered that there’s a consultant that would soon commence a training in Funafuti. However due to Covid, the training was postponed until further notice. He mentioned that there’s a size limit ruler that have the size limit for some fish.
- Simona asked was there a way for the kaupule to establish the MPA.
  - Lavata answered that he would raise this to the senior admin officers.
  - He answered that we could??
- A fisher mentioned that he saw some fishers catching fish that were undersized.
  - Paeniu answered that there’s a fish size ruler that could help fisher compare fish size
- Sami commented on the Funafuti MPA and ways for Nanumea to create an MPA
  - LN answered that there’s a process for creating the MPA. The community need to have a discussion on which site proposed to be an MPA.
  - Hetoa added on how Funafuti established its MPA (FCA).

1457

- Pafini presented on the Sea Safety of Fishermen
  - Pafini recapped on Maani's presentation and gave a solution that fishermen should fish in pelagic waters.
  - Briefly outlined his presentation
  - Talked on the 5-minute prep of rescuing fishers lost at sea
  - He talked on the disadvantages of having a 5-minute prep
  - He gave an example from the case in Niulakita for not being prepared before going fishing.
  - He talked on ways to help fishermen to be prepared.
    - Weather update
    - Informing of relatives and friends
    - Checklist of fishing equipment
    - Checking on the Motor
  - He concluded his presentation by summarizing his topic and the importance of sea safety.
- Floor was opened for discussion

1505

- A fisher commented on the prep and mentioned on the Weather Update and life jacket in which the fishers faced an issue.
  - Pafini answered that fisheries would look into it and ????
- Tofiga thanked the presenters and commented that there were some fishers that have the life jacket but do not know how to use it.
- Tofiga requested the team if the team could have an inspection on the Grab Bags and evaluate the sea safety equipment.
- Pafini mentioned that there's only one activity left which was the signing of the MOU Grab Bags. He added that there were delays due to some islands haven't signed the MOU.
- Pafini mentioned that there's an activity for Grab Bag inspection. However, if the fishers want to have a refresher training then the team could arrange it.

1516

- Maani thanked the audience for attending the program and having constructive discussion
- Neia thanked the team for presenting and also he thanked the community for coming to the event.
  - He apologized on behalf of the team that some question could not be answered.
- Closing prayer commenced

1520

- Program concluded with the group photo.

## Minutes

**Date:** 29/09/2021

**Time:** 1101

**Venue:** Kaumalie Primary School (Nanumea)

**Event:** Awareness Program - School

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### Activities

#### 1101

- Awareness Program commenced
- Maani thanked the students and staff for coming to the event
- Briefly explained the purpose for the program
- Each member of the team introduced themselves to the audience

#### 1108

- Lavata presented first on the Importance of LMMA and MPA
  - Explained the differences between LMMA and MPA
  - Talked on the LMMA sites in the Nanumea map.
  - Talked on the benefits of establishing the MPA
  - Discussed the disadvantages of not establishing the MPA
  - Talked on the solutions on ways to set up the MPA.
  - Concluded his presentation by summarizing his presentation
- Floor opened for discussion.
- Lavata gave a pop quiz to the students
  - Long form for LMMA
  - The LMMA for Nanumea. One in Lakena where is the other located.

#### 1118

- Filipo presented on the issues of overfishing
  - Explained the fishing practice from the old to modern fishing practices by looking at the boat, fishing gears and motor presence.
  - Explained the size difference of fish from 1965, 1985 and 2015
  - Talked on the human population and its number of offspring from less than 2, at 2 and more than 2 children. Then compared it to the fish spawning
  - Explained an image showing the MPA, Spawning Season, Issuing of Fish License, Creel and Fishing Gear Inspection
  - Explained on the Fish Size sticker and its features
  - Recommended on way to conserve marine resources
  - Concluded his presentation
- Floor opened for discussion
- Filipo gave a pop quiz for the students
  - What's one way to conserve marine resources? Eg. MPA

- Is there a change of fish size nowadays?

1129

- Pafini presented on Sea Safety of Fishermen
  - Talked on the 5-minute preparation on rescuing fishers lost at sea
  - Disadvantages of having the 5-minute prep in rescuing fishers lost at sea
  - Talked on the ways of fishers preparing themselves before heading out at sea
    - Weather update from Radio
    - Informing of family relatives and friends of your fishing trip
    - Checklist on checking the grab bag – sea safety equipment
    - Check on the motor
  - Concluded his presentation by summarizing his presentation
- Floor opened for discussion
- Pafini gave a pop quiz
  - What's one disadvantage of 5-minute prep?
  - State one preparation that fishers must do before fishing.

1139

- Maani thanked the students and staff for attending the event
- Matapua gifted the school incentives to the staff of Kaumalie Primary School.
- A staff member gave the vote of thanks to the presenters and topics delivered to the students.

1144

- Program ended with the group photo.

#### Minutes

**Date:** 06/10/2021

**Time:** 1416

**Event:** Kaupule Consultation (Closing) - Nanumea

**Venue:** Nanumea Land Court

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#### Activities

1416

- Tofiga made an opening prayer for the consultation
- Maani welcomed the Kaupule members for the final consultation in reporting back the activities done during the team's stay in Nanumea
  - He discussed the reports on the Community Consultation, Awareness Program, CFP Case Updates, Boat & Canoe Survey, Manta Tow in Nanumea Lagoon, and LMMA Activity.

- He mentioned that the Sea Cucumbers were abundant in the Passage but least towards the lagoon.
- Floor was opened for discussion

1423

- A Kaupule member commended the team that went for Manta Tow. He mentioned that Semese and Uschi did the BDM counts years ago. He also mentioned that the community was willing to ask Pafini to do refresher training for the Nanumea Fishermen Association on Sea Safety equipment like Life Jacket. Thanked the team for the summary report
- Neia commented on results on the count of BDM.
- Tofiga thanked the team for reporting. He commented on activities done in Grab Bag Inspection. He found that the Inspection was useful.
- Pafini reported back on the Grab Bag Inspection
  - He apologized for not giving a summary of the report as the activity was done a while ago.
  - He mentioned that he inspected only 5 Grab Bags whereas 11 were not present for inspection. He mentioned that the report could not be made because not all Grab Bags were there during the Inspection.
  - He talked on the CFC and mentioned that there was no update from the MFT Secretary on the request. Pafini mentioned that the Project (EIF) from Trade will be joining with Pafini.
- Tofiga thanked the whole team for reporting back. He mentioned on 10 Grab Bags that was not inspected. He asked on who can carry out the Inspection if the Fisheries Team not in Nanumea.
  - Pafini answered that the Chairperson of the Fishermen Association does the inspection of the Grab Bag.
- Tofiga asked which stakeholder was responsible of the Grab Bag, whether the Kaupule or the Fishermen Association.
  - Pafini answered that the Kaupule and the Fishermen Association play a role on the Grab Bag handling. He mentioned that he send the copy of the Grab Bag MOU for clarification.
- Tofiga commented on Pafini's point and need to be vigilant in caring of the Grab Bag.
- Neia reiterated Pafini's point on the arrival of Grab Bags. He mentioned that he would look into it closely.
- Pafini clarified to the Kaupule that he would like to be in the loop in knowing the updates about the Grab Bag. He mentioned that the plan would be made once there was written evidence been sent to the Nanumea Kaupule (Secretary and Neia) on the Grab Bag.

1442

- Maani requested to allow the Tractor to pick the luggage and equipment from the Team's non-residential area.
  - Tofiga answered that he would look into it and would like to know the exact time for the team to depart.

- Tofiga thanked the team again on the reporting and also summarizes the point made from the team's reporting.
- Closing prayer commenced.

1446

- Consultation concluded

### 6.5.3 Niutao

#### Minutes

Date: 08/10/2021

Time: 0930

Venue: Kaupule Conference Room - Niutao

Event: Kaupule Consultation -Opening

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#### Activities

0930

- The Pule KPL gave the opening remarks
- Maani thanked the KPL and opening prayer commenced.

0933

- Each team member introduced themselves to the Kaupule
- The Kaupule members introduced themselves to the team.
- Maani briefly talked on the team's purpose for coming to Niutao and also allowing the Kaupule to make some changes in the tentative program
- Briefly explained the program for 9 days activity
- He passed the floor to the KPL for any comments and changes needed in the tentative program.

0949

- The Pule Kaupule informed the team that on Monday is a public holiday. He mentioned that if the person dies in Niutao, all work is ceased.
- He mentioned that the approval depends on the Chief of the Island on whether the activities could commence.
- Tanei asked on the Sea Cucumbers. He mentioned that if there's info on the bdm harvesting.
  - Matapua answered that there was a survey done in counting the number of bdm. She mentioned that that was the build-up of creating the national management plan of BDM.
- Tanei asked on Niutao's authority when it comes 12 NM.

- Maani answered that within 12 NM is under the authorization of the FaleKaupule Act. Also, mentioned that the Marine Resource Act was quite contradictory on which party controls the 12NM boundary. He clarified the difference of the Marine Resource Act and the FaleKaupule Act in terms of controlling the 12 NM boundaries.
- Tanei commented on the Matapua's point on harvesting BDM.
- Puleia commented on Boat & Canoe. He asked on the updates of the Canoe that rumoured to be distributed to Niutao during Neli's visit.
- Matapua asked about the reporting of the canoe and boats
  - Puleia clarified it that it was Pafini's team that made the survey on the boat and canoe. Report was not presented to the community.
    - Paeniu answered that the survey was done during the RAT period.
- Maani asked on the Monday's program
  - Pule Kaupule answered that it will first seek approval to community.
  - Maani requested the KPL on which day would be suitable for the community to have a consultation.
    - Pule Kaupule would let Maani know which day would be suitable after they discussed with their Kaupule members.
  - Maani would arrange to give the copy of the tentative program
- Maani asked the KPL if there's a policy in Niutao
  - Pule Kaupule gave out some policies in staying in Niutao.
  - Tanei added that alcohol drinking is prohibited on Sundays. Driving slowly on the track to prevent dust
  - Secretary added on the bell times and when the bike could travel.
    - He apologized for not reading the email which delayed the meeting with the Kaupule consultation
- Pule Kaupule thanked the team for today's program.

1018

- Kaupule consultation concluded

### Minutes

**Date:** 12/10/2021

**Time:** 0925

**Venue:** Fetu Afiafi 3

**Event:** Niutao Community Consultation & Awareness

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### Activities

0925

- The elder commenced the program by welcoming the audiences and the team for the program.
  - An apology for the late arrival to attend the program
  - Opening prayer commenced

0928

- Maani gave salutations to the audience
- Brief outline of the program
  - Selection of the issues listed within the Management Plan to be the main priority to be funded.
- Each member of the team introduced themselves to the audience

0936

- Maani passed the floor to Hetoa in presenting the Management Plan from Niutao
- Hetoa talked on the Niutao Management Plan created from the R2R Project
  - Mentioned that that presentation was focused on Fisheries related issues
  - Talked on the issues prevalent in Niutao
    - *Akau ko mao ona ko vaka faika*
    - *Muu kalisi o ika ote papa*
  - Discussed on the solutions and work done on the first issue (*Akau ko mao ona ko vaka faika*)
  - Discussed on the solutions of the second issue (*Ika ote papa ko mutana*)
    - Briefly mentioned on the first solution – *Se taa ika foliki*
    - Briefly mentioned on the second solution in expansion of the LMMA/MPA's boundary
    - Briefly mentioned on the third solution which was in placing of rubbish bins near the LMMA site
    - Briefly mentioned on the last solution was to create the MPA in order to have a nursery.
  - He mentioned that the donor was willing to fund the island's first priority from the Niutao Management Plan.
    - He gave the advice of each issue and their solutions; how the funding would fund their issue.
- Floor was opened for discussion

0949

- Maani reiterated Hetoa's presentation

- Funding of issues
- Fisheries interest in the Management Plan
- Floor opened for discussion
- Gatii thanked the team for presentation. Commented on the 2<sup>nd</sup> Issue particularly on the 1<sup>st</sup> solution. He asked as to why we should not kill the small fish.
- Taliu (IP Man) commented on the issues. He raised concern on the killing of small fish; other fish were small like *Manini*.
- Sitaake commented on the first issue:
  - Commented further on funding to fund the solutions in the first solution.
  - He mentioned on the fishing practices in catching small fish that should be included in the solution of not killing small fish.
- Puasina commented on the increasing of LMMA boundary. She mentioned that the Niutao lagoon was not large compared to other islands. She asked on what are other ways in help solve the issue “*Ika ote papa ko mutana*”.
  - Lavata answered that the Kaupule has the authority of controlling the LMMA site. He mentioned on the creation of MPA in Niutao to solve the reef fish problem.
  - Paeniu added on to Lavata’s point. He briefly explained the differences between LMMA and MPA.
- Lepaio commented on the 2<sup>nd</sup> issue. He explained the issue on the Niutao Lagoon. He added that creating the fish pond should be considered the solution as that solve the reef fish problem.
  - Paeniu commented on that part. He mentioned that he had experienced in working in the fish farms. He added that fish pond creation would be very expensive in terms of operational costs.
- Taliu commented on the creation of MPA in the Niutao Lagoon. He said that deploying FADs in the lagoon could help in restoring the reef fish.
- Apete commented on the possibility of FADs deployment in the lagoon. He mentioned on the FADs cases been missing. He commented on the fish pond and mentioned that it would be highly unlikely that the fish pond would operate in the long run.
- Hetoa responded on Lepaio’s query based on fish pond
  - He mentioned that the creation of fish pond could be possible yet expensive. He mentioned further that creation of MPA could be a solution.
- Tetoa commented on fishing net size to be prohibited in order to prevent catching of small fish. He pointed out that the fisheries should work closely on interviewing with fishers.
- Gatii commented on catching small fish. He mentioned that prohibiting of small fish could affect the community’s food source
- Commented on the FADs deployment. He recalled that Feagaiga mentioned that there were 6 FAD’s was supposed to be deployed???
- Maani thanked for the constructive criticism. He clarifies the purpose of the funding. He added on that the policy on the small fish catch should be under the Kaupule’s authority. He weighed the differences of creating and not creating the MPA and its impact on the coastal marine resource.
- Lifuka commented on the Boat & Canoe construction. Mentioned that the work of fisheries in the past tend to “All bark no bite”.
  - Maani responded that Pafini look closely on that
- Lifuka asked on the funding of issues listed in the Management Plan
  - Maani clarified that on the issues and where the funds could fund specifically.

- Apete commented on the 2<sup>nd</sup> Issue. He mentioned that the funds should invest on FADs.
    - Maani clarified that FADs cannot be included in the existing Management Plan
      - Apete insisted to have the FADs included in the existed Management Plan
    - Maani displayed the original Niutao Management Plan to scroll through the plan. He later mentioned that the plan only had 2 issues listed in the Management Plan.
  - Katepu commented on FADs to be added into the existing Management Plan.
  - Sitaake recalled that the R2R (Ridge-2-Reef Project) had the community consultation
    - Paeniu recalled that Niutao community was present in the creation of the Management Plan. He added on that there was a part of the activity where the community needs to decide which issues need to be omitted when they did the listing of Prioritization.
  - Lepaio asked if the Niutao Management Plan was not fabricated.
    - Maani answered that that Management Plan was not fabricated.
- 1103
- The ballot was made to select one issue to be funded.
    - FADs was selected unanimously albeit that the FAD does not exist in the Management Plan.
- 1105
- Maani thanked the community for the constructive discussion and criticism.
  - 20 minutes break commenced.
- 1125
- Maani presented on the Niutao Creel Report.
    - Brief introduction on the Report
    - Explained on the % landed fishers that were undersized
    - Explained on the number of fish weight per fisher per hour
    - Explained on the number of fish weight per fisher per trip
    - Explained the list of fish that was commonly caught undersized
    - Explained the challenges of conducting creel and the impact on the results
    - Concluded his presentation in summarizing the points made previously
  - Floor opened for discussion
- 1140
- Lepaio asked on the breeding seasons for fish
    - Filipo answered that the breeding season for all fish was not known. However, the fish size sticker was made as an indicator to measure the matured length
  - A community member asked on the pelagic fish's mature length
    - Paeniu answered that the Coastal Section focused solely on Reef Fish.
  - Apete asked if there's an assistant for the Data Collector
    - Maani answered that there's Community Fisheries Officers (CFOs) who were currently in training. Those officers would assist the Data Collector in doing Creel.
  - Gatii asked on the maturity of the fish with their gonads

- Filipo answered that the consultant was supposed to train the fisheries officers. However, due to CoVID, the consultant could not come to Tuvalu.
- Vaitusi commented on the Creel Report. Commended the Fisheries Team for their work and presentation.

1151

- Lavata presented on the Importance of LMMA & MPA
  - Explained the differences of LMMA & MPA
  - Explained the benefits of MPA
  - Explained the disadvantages of not monitoring well in the MPA
  - Explained solutions in ways to monitor the MPA
  - Concluded the presentation by summarizing the points.
- Floor opened for discussion

1200

- A community member asked if there was a report based on the effectiveness of establishing LMMA or MPA.
  - Lavata answered that at that moment, it was none. He mentioned that in next year, the survey would be conducted in all LMMA areas.
- Gatii commented on the 12 NM boundary and he wondered whose authority could penalized the Fishing vessel (if the fishing vessel cross that 12 NM boundary)
  - Paeniu mentioned that there was a review of the Act done in Funafuti.
  - Maani added that there were 2 Acts based solely on the maritime boundary. He mentioned that there was specific powers that the Government and the Falekaupule authorization of the 12 NM boundary.
- Alusai asked on who was responsible of looking into the LMMA
  - Lavata answered that the island leaders were in charge of LMMA sites.
- Maani passed the floor to Pafini Fepuali.

1205

- Pafini made an energizer for the community. Paeniu gave a live demo on diving techniques on shark alert.
- Pafini presented on the Importance of Sea Safety
  - Briefly explained the '5-minute' strategy
  - Explained the disadvantages of having the '5-minute' strategy. Mentioned a case in Niulakita
  - Explained the steps of fully prepared before fishing
  - Concluded his presentation in summarizing the points made previously.
- Floor opened for discussion.

1217

- Apete asked on the Grab Bags and its equipment. He asked what were the ways to procure new sea safety gears
  - Pafini answered that there were ways to procure the items like the VDS.
- Manatu asked if it's possible to supply the sea safety equipment
  - Pafini answered that once the supplier was found with its quotation. Then, the sea safety equipment would soon be procured and distribute to the Outer Islands.???
- Kapua mentioned that there were some Grab Bags arriving soon to Tuvalu.
  - Pafini answered that there were some Grab Bags been listed. However, some islands have not signed the MOU for Grab Bags.
- Gatii commented that majority of the Sea Safety equipment were expired.
- Alusei commented on the team that conducted the survey on canoes.
  - Pafini answered that there was a team that conducted that survey. The RAT (Rapid Assessment Taskforce) Team conducted the survey as one fisheries officer was part of the taskforce.
- Lepaio asked on when the canoes be delivered to the outer islands.
  - Pafini answered that at the moment the canoes were already built. The canoe builders were building the fiberglass boats.

1234

- Maani thanked the audience for the attending the program. Also their contribution to the program in giving constructive criticism and discussion.
- Setala thanked the team and its presenters for the day's program.
- Closing prayer commenced

1239

- Group photo commenced
- Program concluded

### Minutes

**Date:** 14/10/2021

**Time:** 1043

**Venue:** Webley Primary School

**Event:** Awareness Program - School

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### Activities

1043

- Program commenced
- Maani briefly explained the purpose of the awareness program
- Team members introduced themselves to the students and staff
- Maani passed to the first presenter: Lavata Nivaga

1051

- Lavata presented on the Importance of LMMA & MPA
  - Explained the differences between LMMA and MPA
  - Explained the features on the map of Niutao
  - Talked on the benefits of having an MPA established
  - Talked on the disadvantages of not establishing the MPA
  - Solutions on strengthening the MPA
  - Concluded his presentation in summarizing the points made previously.
- Floor opened for discussion
- A staff member asked on the LMMA. He mentioned that Niutao only has an LMMA. He asked on the MPA and who takes care of it
  - Lavata answered that the island community needs to look into ways of establishing the MPA. Fisheries can only assist.
    - He asked if Niulakita has an existing MPA.
      - Lavata answered that at the moment it's still in the process of establishing the MPA.
- Commented on the LMMA and its effectiveness. He mentioned that the fish from the LMMA is small in size
  - Lavata answered that at the moment there was no recent report on studying the LMMA's effectiveness. He mentioned that the R2R conducted some survey in the LMMA.
  - Commented that there was a lot of catch from the LMMA when the island had a recent community event. Pointed out if the team could look into the LMMA
- Lavata gave a pop quiz
  - What's the long form for LMMA?
  - Where the LMMA in Niutao located?
  - Whats a solution of strengthening the LMMA?
- Maani passed to the next presenter: Filippo Makolo

1106

- Filippo presented on the Issues of Overfishing
  - Explained the images of showing the differences of fishing gears, motor and fuel use.
  - Explained the fish size in the periods of 1965, 1985 and 2020
  - Explained the human population example on the differences of: less than 2, at 2 and more than 2 children.
  - He compared the human population example to the fish spawning of: less than 20%, at 20% and more than 20%
  - He talked on the solution of the overfishing issue
    - Explained on MPA, Spawning Season, Issuing of Fishing License, Creel and Fishing Gear Inspection.
    - He mentioned on the fish size sticker and how it can be used to compare the fish size.
  - Explained the impacts of overfishing and how it affected the livelihoods in the community.

- Concluded his presentation for students to cooperate.
- Floor opened for discussion
- Filipo gave a pop quiz
  - Give 2 solutions that can solve the overfishing problem.
- A staff member asked on how many fertilized eggs to be released from the fish
  - Filipo answered that its more than a 1000
    - Asked on the spawning season for the *Gatala* or any fish.
      - Answered that at the moment the consultant would be training the staff on Fish Size.
- Maani passed the floor to Pafini Fepuali

1119

- Pafini gave the pop quiz
  - What's one main issue that Filipo presented?
- Pafini gave an energizer to the students on diving instruction
- He presented on the Sea Safety of Fishermen
  - Explained on the "5-minute activity"
  - Explained the disadvantages of the "5-minute activity"
  - Talked on ways of being prepared before fishers go for their fishing trip
    - Weather update from the radio
    - Checklist of sea safety equipment
    - Informing friends and relatives on the time they go fishing
    - Motor check
  - Concluded his presentation in summarizing the points made previously.
- Floor opened for discussion
- Pafini gave a pop quiz
  - Give 2 out of 4 ways that fishers should be prepared before going fishing
  - Give 2 reasons on the importance of the "5-minute activity".
  - Give one function of the O&D within the TFD.

1132

- Maani thanked the students and staff for attending the awareness program
- Maani gifted the school incentives to the school
- A student gave the vote of thanks to the team for the awareness program and how it helps their families and community.
- Staff member gave a challenge to the team in looking into the coastal resources of Niutao
  - Ways that can improve coastal resources
- The head teacher thanked the team for the awareness program. Recommended to have the fish size sticker to be delivered to the school for students to know the matured length of fish.

1141

- Group photo commenced

1144

- Program concluded.

### Minutes

**Date:** 15/10/2021

**Time:** 0933

**Venue:** Kaupule Office – Conference Room

**Event:** Kaupule Consultation - Closing

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#### Activities

0933

- Taupee gave an opening remarks
- Kapua gave an opening prayer

0934

- Maani thanked the Kaupule members for coming for the final consultation
  - Briefly explained the purpose of that consultation – reporting back of surveys done in Niutao
- Maani gave an introduction of the report and outlined the report
  - Talked on the results done during the Community consultation
    - Mentioned that the FADs have been included in the Niutao Management Plan and the FADs would be funded by the donor.
  - Talked on the awareness program done from community and school
    - Mentioned on the highlighted comments and discussion done during the community awareness program
    - Talked on the school awareness program done and the activities done during that program
  - Talked on the field activities
    - Mentioned on the CFP case update from the Medical Centre – 0 cases as of that date.
    - Mentioned on the Boat & Canoe survey done and the counts done
  - Maani passed the floor to Lavata to talk on the LMMA activity
    - Mentioned that at the moment there were no changes done in the LMMA
    - Recommended that having a notice board or a billboard to be placed in LMMA site for awareness
  - Maani talked on the Grab Bag Inspection & Refresher Training
    - Mentioned the number of grab bags been inspected
    - Mentioned on the refresher training done during the inspection
    - Talked on the issues that some bags have not been inspected, additional items and expired sea safety products.
  - He talked on the FADs Status

- Mentioned on the achievements done – team’s duration of searching the FAD
- No FADs were found in Niutao and found out that sharks were surrounding the area that they searched.
- Recommended that if the fishermen can make the FAD and deploy
  - Hypothesized that the rope tied to the FAD might have been cut off or sank.
- Concluded his findings and passed the floor for discussion.

0953

- Kapua commented on the FADs during the community consultation. He thanked the team for setting up the summary report.
- Gatii commented on the Grab Bag. He mentioned that the sea safety products need to be replaced soon for the safety of fishermen. He mentioned on the VHF that have 2 in one grab bag. He asked if its ok to have a spare.
- Tanei commented on the CFP case update. He mentioned that in the past there were some cases of CFP. He mentioned that he had been affected with CFP.
  - He mentioned on the school awareness to have a sea safety practice workshop.
  - He commented on the FADs and how the community (especially fishers) to monitor their FADs.
  - He commented on installing of billboard or notice board. He mentioned that there were some boards installed but the board itself was made of plywood which resulted the plywood to decay.
  - Thanked the team for summary report.
    - Filipino answered the query on the CFP point. He mentioned on the cases that the team look at was the case for 2021.
- Tavee asked on the fund, \$10K, on what would happen to the left over. He mentioned on the shark issue.
- Gatii commented on the Grab Bag policy. He mentioned that if the fisher migrate to other island; Grab Bag must remain in Niutao.
- Tanei commented on Gatii’s point. He mentioned on the training done by Neli and Tupulaga.
- Lavata answered on Tanei’s point in installing the billboard. He asked if there was an MPA in place in Niulakita, he wanted to know if the Kaupule members were aware of that.
  - Tanei was aware of the MPA been established but unsure when it started.
  - Kapua added that he just found out about Niulakita having an MPA
  - Gatii commented on the Niulakita MPA.
  - Kapua answered that only a few attended the workshop. The whole community was not involved on that; most were surprised on Niulakita.
- Lavata commented that the team was surprised that Niulakita was in the process of establishing the MPA. He mentioned that the R2R might have influenced the Niulakita community to establish an MPA.
- Tanei asked on the procedure of establishing the MPA. Is it possible for only one person to establish the MPA.
  - Lavata answered that its not possible must follow the proper procedure
- Tavee commented that the R2R have influenced Niulakita and was not aware of the MPA in Niulakita. He mentioned that someone might have done it without the Kaupule being aware.

- Tauee commented on the officer, Lale Petaia, on the promises he gave to the community a few years ago.
- Tauee thanked the team for the reporting

1022

- Maani thanked the Kaupule for attending the consultation
- He mentioned on the funds especially the left over
  - He mentioned that the left funds would still be with the island community. He mentioned that the fund would be used to pay for freight and other additional charges.
  - He mentioned that Pafini would look into that.
- Passed the floor to the Kaupule
- Tauee thanked the team for reporting back and the work done in Niutao
- Closing prayer commenced.

1029

- Program concluded

## 6.6 Attendance Sheet

### 6.6.1 Nanumaga

Figure below shows the attendance of consultation and awareness that was done on Nanumaga Island.

Nanumea : Kaupule Consultation  
Attendance sheet

Venue: FAIMUWATA/NANUMEA (NANUMEA) Tuvalu Fisheries Department Date: 01/09/13

NAME	AGE	GENDER	OCCUPATION	SIGNATURE
Sikiga Taimi	53	M	P/Kaupule	<i>Sikiga</i>
Talima Tebua	63	M	P/Kaupule	<i>Talima</i>
Piliva Lee	70	M		<i>Piliva</i>
Setai Setai	55	M	Tupu	<i>Setai</i>
Faitaha S	41	M	Talava	<i>Faitaha</i>
Notano M	31	M		<i>Notano</i>
Filaga P	49	M		<i>Filaga</i>
Sesona S	59	M		<i>Sesona</i>
Melua A	37	M		<i>Melua</i>
Lupha L	56	M		<i>Lupha</i>
Qasa M	64	M	Manager	<i>Qasa</i>
P. Keliha	43	M	Beit	<i>P. Keliha</i>
Lea T	49	M	Beit	<i>Lea</i>
Kaga Leta	54	M	Beit	<i>Kaga</i>
Alua	55	M	Beit	<i>Alua</i>
Tamama L	39	M	Talava	<i>Tamama</i>
Qasa A	46	M	Beit	<i>Qasa</i>
Mae Tama	52	M	Beit	<i>Mae</i>
Tamot Mka	41	F	Manager & Mgr. Sec. Kaupule	<i>Tamot</i>
Qasa F	25	M	Beit	<i>Qasa</i>
Taliva Lee	43	F	Talava	<i>Taliva</i>

Name	Occupation	Age	Signature
Sikiga Y	P/Kaupule	53	<i>Sikiga</i>
Isopo T	KP	55	<i>Isopo</i>
Pasa S	Kaupule	64	<i>Pasa</i>
Notano P	KP	42	<i>Notano</i>
Taimol Mka	Ata Secretary	41	<i>Taimol</i>
Melua Leta	Planner	43	<i>Melua</i>
Lava Tei	Beit Officer	44	<i>Lava</i>
LITALA	KPL STAFF	47	<i>LITALA</i>
KIARAWO	✓	52	<i>KIARAWO</i>

Venue: KAUPILE OFFICE (NANUMEA) Tuvalu Fisheries Department Date:

NAME	AGE	GENDER	OCCUPATION	SIGNATURE
Sikiga Taimi	53	M	P/Kaupule	<i>Sikiga</i>
Pasa Setai	64	M	V member	<i>Pasa</i>
Isopo Tebua	55	M	Kaupule	<i>Isopo</i>
Notano P	42	M		<i>Notano</i>
Taimol Mka	41	F	Mgr. Sec. & Manager	<i>Taimol</i>

NAME	AGE	GENDER	OCCUPATION	SIGNATURE
Sikiga Taimi	53	M	P/Kaupule	<i>Sikiga</i>
Talima Tebua	63	M	Beit	<i>Talima</i>
Piliva Lee	70	M		<i>Piliva</i>
Setai Setai	55	M	Tupu	<i>Setai</i>
Faitaha S	41	M	Talava	<i>Faitaha</i>
Notano M	31	M		<i>Notano</i>
Filaga P	49	M		<i>Filaga</i>
Sesona S	59	M		<i>Sesona</i>
Melua A	37	M		<i>Melua</i>
Lupha L	56	M		<i>Lupha</i>
Qasa M	64	M	Manager	<i>Qasa</i>
P. Keliha	43	M	Beit	<i>P. Keliha</i>
Lea T	49	M	Beit	<i>Lea</i>
Kaga Leta	54	M	Beit	<i>Kaga</i>
Alua	55	M	Beit	<i>Alua</i>
Tamama L	39	M	Talava	<i>Tamama</i>
Qasa A	46	M	Beit	<i>Qasa</i>
Mae Tama	52	M	Beit	<i>Mae</i>
Tamot Mka	41	F	Manager & Mgr. Sec. Kaupule	<i>Tamot</i>
Qasa F	25	M	Beit	<i>Qasa</i>
Taliva Lee	43	F	Talava	<i>Taliva</i>

ATTENDANCE BY: SEPASATEL PANAING  
KAPAS BEIT INSPECTION

6.6.2 Nanumea

Venue: KAUPULE OFFICE (NANUMEA) Tuvalu Fisheries Department Date: 21/09/13

NAME	AGE	GENDER	OCCUPATION	SIGNATURE
Kaga Leta	54	male	Kaupule	<i>Kaga</i>
Mae F. Tava	50	✓	✓	<i>Mae</i>
ISELI LEAHI	65	✓	✓	<i>ISELI</i>
Taimol Y Tebua	59	✓	✓	<i>Taimol</i>
Taimol SA. P	45	✓	✓	<i>Taimol</i>

Venue: NANUMEA I Tuvalu Fisheries Department Date: 21/09/13

NAME	AGE	GENDER	OCCUPATION	SIGNATURE
Sikiga Taimi	53	M	P/Kaupule	<i>Sikiga</i>
Pasa Setai	64	M	V member	<i>Pasa</i>
Isopo Tebua	55	M	Kaupule	<i>Isopo</i>
Notano P	42	M		<i>Notano</i>
Taimol Mka	41	F	Mgr. Sec. & Manager	<i>Taimol</i>

ATTENDANCE BY: NANUMEA CONSULTATION / SEPASATEL



